

Listing of Claims

The following claims list supercedes any other listing of the claims of the invention.

1. (Original) A method for controlling access to an object in a data processing system, the method comprising:

receiving an access request to access the object from a task;

classifying the access request into one of critical and non-critical classes in dependence on stored access control data associated with the object and the task;

granting the task access to the object and storing data indicative of the access in an access log if the access is classified into the non-critical class; and,

in the event that the access is classified into the critical class, granting or denying the task access to the object in dependence on the contents of the access log and the stored access control data.

2. (Original) A method as recited in claim 1, further comprising, in the event that the access is classified into the non-critical class, granting or denying the task access to the object in dependence on the access control data, and storing data indicative of the grant or denial in the access log.

3. (Original) A method as recited in claim 1, wherein the non-critical class comprises a plurality of subclasses and the classifying comprises classifying the access request into one of the subclasses in dependence on the stored access control data.

4. (Original) A method as recited in claim 1, wherein the subclasses comprise a first subclass and a second subclass.

5. (Original) A method as recited in claim 4, further comprising storing recovery data in the access log if the access is classified into the second subclass.

6. (Original) A method as recited in claim 5, further comprising:

inspecting the access log to identify a bad grant decision based on the contents of the access log and the access control data; and,

on detection of a bad grant decision, rolling back any objects affected by the bad grant decision.

7. (Original) A method as recited in claim 6, wherein the rolling back comprises recovering data overwritten in the object.

8. (Original) A method as recited in claim 6, further comprising performing the inspecting periodically.

9. (Original) A method as recited in claim 6, further comprising performing the inspecting during periods in which the data processing system is otherwise idle.

10. (Original) An apparatus for controlling access to an object in a data processing system, the apparatus comprising:

an access control data store for storing access control data associated with the object and the task; an access log;

access control logic for receiving a request to access the object from a task;

decision classifier logic, connected to the access control logic, the access control data store, and the access log, for classifying the access request into one of critical and non-critical classes in dependence on the access control data, and, in the event that the access is classified into the non-critical class, for granting the task access to the object and storing data indicative of the access in the access log; and,

access control decision logic connected to the access control logic, the access log, the access control data store, and the decision classifier logic, for, in the event that the access is classified into the critical class, granting or denying the task access to the object in dependence on the contents of the access log and the access control data.

11. (Original) An apparatus as recited in claim 10, wherein, in use, the decision classifier logic, in the event that the access is classified into the non-critical class, grants or

denies the task access to the object in dependence on the contents of the access control data, and stores data indicative of the grant or denial in the access log.

12. (Original) An apparatus as recited in claim 10, wherein the non-critical class comprises a plurality of subclasses and the decision classifier logic, in use, classifies the access request into one of the subclasses in dependence on the access control data.

13. (Original) An apparatus as recited in claim 10, wherein the subclasses comprise a first subclass and a second subclass.

14. (Original) An apparatus as recited in claim 13, wherein the decision classifier logic, in use, stores recovery data in the access log if the access is classified into the second subclass.

15. (Original) An apparatus as recited in claim 14, wherein the access control decision logic, in use, inspects the access log to identify a bad grant decision based on the contents of the access log and the access control data, on detection of a bad grant decision, effects a roll back of any objects affected by the bad grant decision.

16. (Original) An apparatus as recited in claim 15, wherein the rolling back comprises recovering data overwritten in the object.

17. (Original) An apparatus as recited in claim 15, wherein the access control decision logic, in use, performs the inspection periodically.

18. (Original) An apparatus as recited in claim 15, wherein the access control decision logic, in use, performs the inspection during periods in which the data processing system is otherwise idle.

19. (Original) Data processing system comprising:

a central processor unit;
a memory; and
apparatus as recited in claim 10 connected to the central processor unit and the memory.

20. (Currently Amended) A computer ~~Computer-program product, the computer program product element~~ comprising:

a tangible storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing computer program code means which, when loaded in a processor of a computer system, configures the processor to perform a method as recited in claim 1.

21. (Currently Amended) An article of manufacture comprising a computer usable medium for storing having computer readable instructions, which instructions, when processed by program code means embodied therein for causing control of access to an object in a data processing system, cause the data processing system to execute the steps set forth in the method the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1.

22. (Original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for controlling access to an object in a data processing system, said method steps comprising the steps of claim 1.

23. (Currently Amended) A data processing system, the data processing system comprising an apparatus for controlling access to at least one object in the data processing system, wherein said apparatus is set forth in computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing control of access to an object in a data processing system, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the functions of claim 10.